

and administration, transportation requirements, harvesting, site preparation, planting, stocking control, and future stand tending of harvest cuts of various sizes and shapes. Specification for exceptions shall include the particular conditions under which the larger size is permitted and shall set a new maximum size permitted under those conditions.

(ii) Size limits exceeding those established in paragraphs (d)(2) and (d)(2)(i) of this section are permitted on an individual timber sale basis after 60 days' public notice and review by the Regional Forester.

(iii) The established limit shall not apply to the size of areas harvested as a result of natural catastrophic condition such as fire, insect and disease attack, or windstorm.

(e) *Riparian areas.* Special attention shall be given to land and vegetation for approximately 100 feet from the edges of all perennial streams, lakes, and other bodies of water. This area shall correspond to at least the recognizable area dominated by the riparian vegetation. No management practices causing detrimental changes in water temperature or chemical composition, blockages of water courses, or deposits of sediment shall be permitted within these areas which seriously and adversely affect water conditions or fish habitat. Topography, vegetation type, soil, climatic conditions, management objectives, and other factors shall be considered in determining what management practices may be performed within these areas or the constraints to be placed upon their performance.

(f) *Soil and water.* Conservation of soil and water resources involves the analysis, protection, enhancement, treatment, and evaluation of soil and water resources and their responses under management and shall be guided by instructions in official technical handbooks. These handbooks must show specific ways to avoid or mitigate damage, and maintain or enhance productivity on specific sites. These handbooks may be regional in scope or, where feasible, specific to physiographic or climatic provinces.

(g) *Diversity.* Management prescriptions, where appropriate and to the ex-

tent practicable, shall preserve and enhance the diversity of plant and animal communities, including endemic and desirable naturalized plant and animal species, so that it is at least as great as that which would be expected in a natural forest and the diversity of tree species similar to that existing in the planning area. Reductions in diversity of plant and animal communities and tree species from that which would be expected in a natural forest, or from that similar to the existing diversity in the planning area, may be prescribed only where needed to meet overall multiple-use objectives. Planned type conversion shall be justified by an analysis showing biological, economic, social, and environmental design consequences, and the relation of such conversions to the process of natural change.

§ 219.28 Research.

(a) Research needs for management of the National Forest System shall be identified during planning and periodically reviewed during evaluation of implemented plans. Particular attention should be given to research needs identified during the monitoring and evaluation described in § 219.12(k). These identified needs shall be included in formulating overall research programs and plans which involve private as well as public forest and rangelands.

(b) Research needed to support or improve management of the National Forest System shall be established and budgeted at the research station and national levels. Priorities for this portion of the Forest Service Research Program shall be based upon the information gathered at all planning levels of the National Forest System.

(c) An annual report shall be prepared at the national level with assistance from Regions and Stations which shall include, but not be limited to, a description of the status of major research programs which address National Forest System needs for Research, significant findings, and how this information is to be or has recently been applied.

§ 219.29 Transition period.

(a) Until a forest planning area of the National Forest System is managed